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DIFFERENT TREATMENTS OF PHOBIA AND THEIR EFFECTIVENESS

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ABSTRACT

This research paper aims to discuss the effectiveness of different treatments of phobia and whether or not some treatments should be abolished in favour of other more effective ones through the results of several trials and studies. These treatments include therapy, medication and self-help. For therapy, in vivo therapy (IVT), virtual reality therapy (VRT) and hypnotherapy (HT) will be discussed. It is found that IVT proves to be the most effective, VRT helps to ease transition into IVT, and HT needs to be used with other types of treatments to bring out its full effects. For medication, both benzodiazepines and antidepressants will be considered. It found that although the use of benzodiazepines is helpful in the acute treatment of phobias, it leads to high risk of withdrawal symptoms, abuse liability and tolerance, while antidepressants such as Monoamine Oxidase Inhibitors and Serotonin Selective Reuptake Inhibitors are commonly more beneficial than benzodiazepines due to lower risks of overdependence. For self-help, web-based self-help treatment with or without therapist guidance is shown to be effective towards overcoming phobias. It is hoped that through this research paper, decisions could be made on the abolishment of certain phobia treatments to reduce patient discomfort and save resources.

KEYWORDS: phobia, therapy, medication, self-help, in vivo, virtual reality, hypnotherapy, benzodiazepines, antidepressants.

INTRODUCTION

Everyone has experienced fear before. However, this fear may sometimes manifest itself into something more severe such that it might interfere with our lives. This excessive amount of fear is generally termed as phobias. More specifically, phobia refers to "marked fear or anxiety about a specific object or situation, and the fear or anxiety is out of proportion to the actual danger posed by it" (American Psychiatric Association, 2013). Typically, the fear, anxiety, or avoidance is persistent, lasting for 6 months or more. If insufficient treatment is provided, this causes clinically significant distress or impairment in social, occupational, or other important areas of functioning. For example, social phobia is associated with elevated rates of school dropout and with decreased well-being, employment, workplace productivity, socioeconomic status, and quality of life. Social phobia is also associated with being single, unmarried, or divorced and with not having children, particularly among men. (American Psychiatric Association, 2013). Therefore, treatment for phobias should be provided to help relieve the negative implications of phobias.

Nevertheless, despite the extent of distress and social impairment associated with social phobia, only about half of individuals with phobias in Western societies ever seek treatment, and they tend to do so only after 15-20 years of experiencing symptoms (American Psychiatric Association, 2013). Thus, there is a limited number of people with phobias who actively seek treatment. Because some treatments for phobias have more side effects or are less helpful than others, such treatments should be abolished to allow more effective treatments to take their place. These treatments will be explored further in the research paper below. There are multiple types of treatments for phobias, namely therapy, medications, and self-help.

Therapy

There are two main types of therapy for treating phobias, which are in vivo therapy (IVT) and virtual reality therapy (VRT). It is hoped that with systematic desensitisation through exposure, the patient will have diminished fear associated with a trigger. Another less common therapy is hypnotherapy (HT), whose effectiveness will be discussed in later parts.

In Vivo Therapy

Firstly, during IVT, patients are exposed to the phobic object or situation in real life. As a type of Cognitive Behavioral Therapy (CBT), IVT is found to be an effective method in repelling the effects of phobias. A study was conducted to identify changes in brain activation using functional magnetic resonance imaging (fMRI) after subjects with specific phobia had been treated with CBT. 28 subjects with a phobia of spiders were randomly assigned to either a therapy-group (TG) or a waiting-list control group (WG), and their brain activation to spider videos was measured. Both groups were scanned twice. Between scanning sessions, CBT was given to the TG. Before CBT, in the first scanning session, brain activation did not differ between the two groups of phobics. However, after CBT, in the second scanning session, compared to the WG, the TG had a much more significant reduction of hyperactivity in the insula and anterior cingulate cortex (Straube et al., 2006), which are both key brain structures associated with the integration of perceived phobic characteristics of external stimuli (Caseras et al., 2013). Therefore, CBT can strongly reduce phobic symptoms in patients. Some may think that heavy exposure to horrific imagery of the feared object is necessary during In Vivo Therapy, but this has proven to be incorrect.

Table 1
Ratings: descriptive data

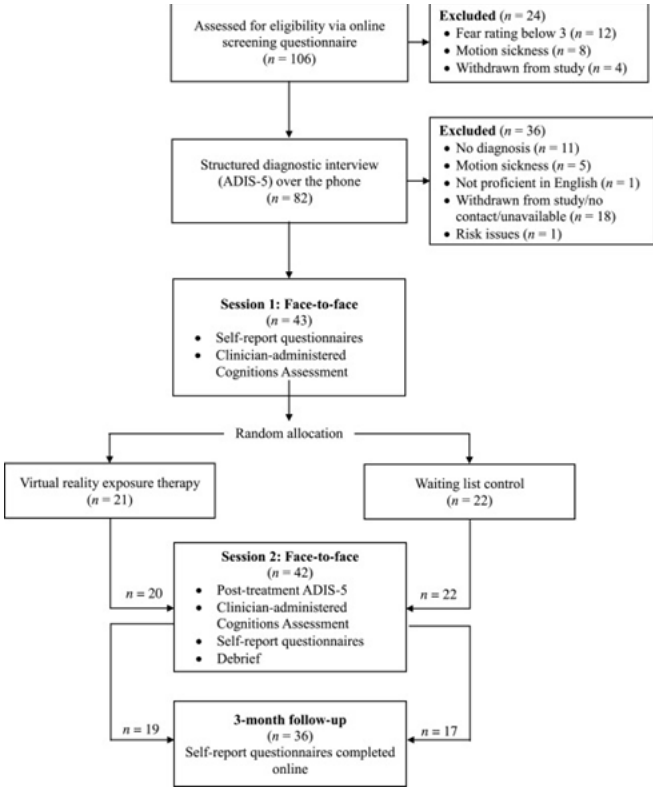
Variable	CG	TG		WG	
	First	First	Second	First	Second
Valence					
Spider	3.64 (0.39)	8.15 (0.25)	5.46 (0.24)	8.17 (0.27)	8.10 (0.25)
Baseline	3.86 (0.40)	3.93 (0.37)	4.31 (0.38)	4.0 (0.48)	4.10 (0.55)
Arousal					
Spider	2.14 (0.39)	7.70 (0.33)	3.15 (0.50)	7.42 (0.36)	7.45 (0.28)
Baseline	1.64 (0.20)	2.08 (0.31)	1.54 (0.31)	2.67 (0.47)	3.10 (0.62)
Fear					
Spider	1.07 (0.07)	6.30 (0.65)	2.77 (0.51)	6.25 (0.65)	6.27 (0.62)
Baseline	1.00 (0.00)	1.38 (0.24)	1.15 (0.10)	1.58 (0.26)	2.27 (0.68)

Data are given as mean (standard error of the mean).

In another study, 36 rat-phobic undergraduates were randomly assigned to 1 of 3 treatment conditions, which were flooding scenes delivered by a tape recorder, flooding with a therapist present, and pleasant imagery. All undergraduates were assessed pre- and post-treatment through interviews on (a) the degree to which the phobia interfered with their daily lives, (b) a behavioural test, and (c) a self-report of anxiety. Results show that all undergraduates showed improvement irrespective of the treatment received and they were all willing to come closer to a live rat after treatment. These findings suggest that presentation of horrifying scenes is not necessary to obtain a favourable outcome in the treatment of phobias. Prolonged exposure to the feared object, even under relatively pleasing conditions was already sufficient (Foa et al., 1977). As a result, IVT proves to be an effective way to treat phobias and should be one of the main methods of treatment for patients.

Virtual Reality Therapy

VRT has been explored as an alternative to IVT recently. VRT is recognized as an effective treatment for some phobias and has the potential to overcome the limitations of IVT, such as acceptability, feasibility and sense of control. However, from research done in previous years, it seems that VRT cannot completely replace IVT. For example, a single session of VRT was conducted for a group of participants with blood-injection-injury (BII) phobia. The results suggested that even though VRT could provide some improvement in fear of injections, injury and fainting, it is not sufficient as a standalone treatment for BII phobia (Y W Jiang et al., 2020). Therefore, VRT should be used as a transitory step before IVT to ease patients into therapy.



Hypnotherapy

HT is induced when a certified hypnotherapist guides a patient into a state of deep relaxation and focused concentration, where the patient becomes more open to suggestions to make changes to his or her health. HT is also one of the ways to treat phobias. However, research shows that its effectiveness may be less than other treatment methods. In one study, twenty-two women, with a mean age of 31.8, were randomly assigned to one of two groups, which are HT and behavioural treatment (BT). Both therapies included eight sessions followed by standardised conventional dental test treatments, which included dental fear, general fear, mood, and patient behaviour. Nine patients were not able to conclude the treatment sessions (6 HT and 3 BT). The BT group reported a statistically significant decrease in dental fear as well as a rise in mood during dental situations, as opposed to the HT group. General fear levels decreased but not significantly. Hence, this study showed that compared to patients who received hypnotherapy, most of the patients who accomplished the behavioural therapy became less fearful of dental care and were able to manage conventional dental care, including changing dentists (Hammarstrand et al., 1995). As a result, more research should be done on hypnotherapy to determine whether it can be used as a standalone treatment method for phobias or should be used in conjunction with other treatments.

Medications

Benzodiazepines

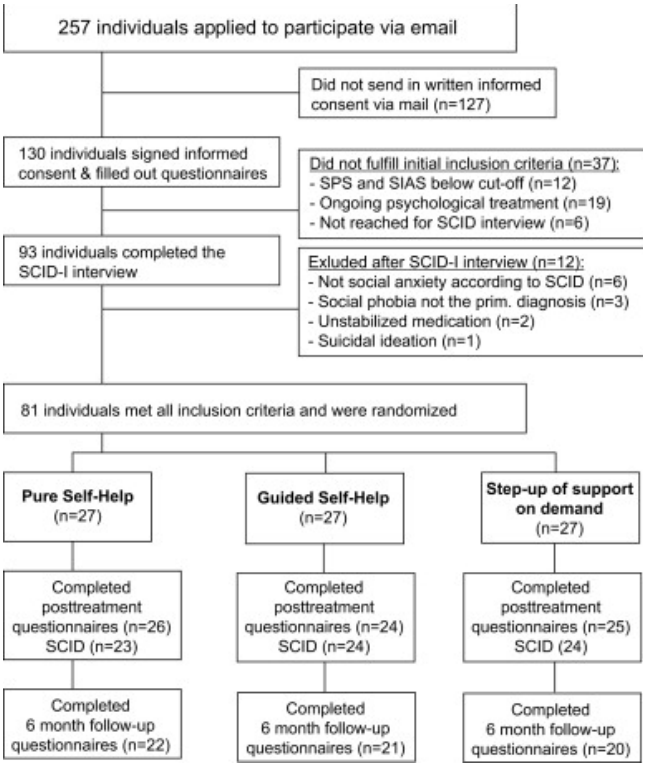
The ethical use of benzodiazepines has been debated over the past few years due to its detrimental side effects and possible withdrawal symptoms. In order to assess the effectiveness of benzodiazepines, in a trial between the effects of psychological treatment and benzodiazepines, 50 dental phobia patients were given either psychological treatment or benzodiazepine. Psychological treatment consisted of stress, management training and imaginal exposure to phobic stimuli with homework assignments, while benzodiazepines were administered 30 minutes before dental treatment. Both treatments led to less anxiety in patients during dental surgery, showing that acute administration of benzodiazepines is effective. However, phobic patients who were administered with benzodiazepines suffered from a relapse after dental treatment and only 20% patients with benzodiazepines continued dental treatment afterwards, whereas those with psychological treatment showed further improvement until the follow-up 2 months later and 70% of patients with psychological treatment chose to continue dental treatment (Thom et al., 2000). Therefore, with the high risk of withdrawal symptoms, abuse liability and tolerance, benzodiazepines are often discouraged from being prescribed to patients, despite their relatively high effectiveness in acute treatments.

Antidepressants

Some common antidepressants used for treating phobias include Monoamine Oxidase Inhibitors (MAOIs) and Serotonin Selective Reuptake Inhibitors (SSRIs). For MAOIs, they are typically effective in the acute treatment of patients with social phobia. However, there still have not been many long-term controlled studies regarding MAOIs. Dropouts are common as well due to patients' poor tolerability to MAOIs (Keck et al., 1997), so the lasting effect of MAOIs remains to be seen. As for SSIRs, they seem to be promising new treatments for patients with social phobia (Keck et al., 1997), but more controlled trials should be conducted to explore more on the efficacy of SSIRs. In summary, antidepressants can offer a number of clinical advantages. Firstly, antidepressants have shown effectiveness in a substantial number of patients. Secondly, antidepressants are successful in tackling comorbid psychiatric disorders that are common in patients with social phobia, including major depression, obsessive compulsive disorder and pain disorders. Thirdly, compared to older antidepressants, including MAOIs mentioned above, newer antidepressants, such as SSRIs, reduce the risks of harmful side effects. Lastly, antidepressants have fewer risks of dependence and abuse liability associated with benzodiazepines (Keck et al., 1997). Therefore, antidepressants relatively have a variety of benefits.

Selh-help

Self-help has been explored as a means to treat phobias too. This is often due to the lower severity of some patients' phobias, unwillingness of patients to actively seek out treatment and a lack of medical resources. For instance, a study found that Internet-based self-help for social phobia with minimal therapist support via email has shown efficacy in several controlled trials. Eighty-one individuals with social phobia were assigned to one of three groups, which were (a) a 10-week web-based unguided self-help treatment for social phobia, (b) a 10-week web-based self-help treatment for social phobia with minimal, although weekly, therapist support via email, and (c) a 10-week web-based self-help treatment for social phobia where the level of support was flexibly increased, from no support to email to telephone contact, on demand of the patients. Primary outcome measures were self-report measures of symptoms of social phobia. Secondary outcome measures included symptoms of depression, interpersonal problems, and general symptomatology. Results showed significant symptom reductions in all three treatment groups with large effect sizes for primary social phobia measures and for secondary outcome measures. No significant between-groups effects were found on any of the measures (Berger et al., 2011). Therefore, Internet-delivered self-help treatment for phobias is a promising option, whether therapist guidance is provided or not.



Conclusion

The three most common ways to treat phobias explored in this research paper include therapy, medications and self-help. Since some treatment methods targeting phobias are more beneficial than others in terms of side effects and efficacy, these treatments should be eliminated or at least used less to avoid causing more harm to the patients. For therapy, IVT serves as an effective method to treat phobias, while VRT helps to ease transition into IVT. Both types of therapy lead to systematic desensitisation through exposure, which makes it easier for patients to encounter the phobic object. Similar to VRT, the properties of HT alone are not sufficient to tackle phobias, which means that it has to be used with other kinds of treatments to fully show its effects, so this also raises concerns over whether HT should be replaced by other treatment methods entirely to save resources and time. For medications, antidepressants are generally more beneficial than benzodiazepines due to the lower risk of overdependence and abuse liability in antidepressants than benzodiazepines. However, benzodiazepines have also been proven to be successful in acute treatment of phobias, so this raises the question of whether benzodiazepines should be done away with or not. For self-help, it shows a substantial amount of

effectiveness towards overcoming phobias, which throws doubt on whether professional treatments for phobias are necessary at all. Therefore, the question of which treatment methods should be removed is still a matter of debate and more research should be done to showcase their full potential or downsides.

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